

1. A cement composition comprising:
a hydraulic cement;
5 water; and
an additive comprising an aqueous suspension of microspheres and a
water swellable clay suspending agent.
2. The composition of claim 1 wherein said hydraulic cement is selected
10 from the group of Portland cements, slag cements, pozzolana cements, gypsum cements,
aluminous cements and silica cements.
3. The composition of claim 1 wherein said hydraulic cement is Portland
cement.
- 15 4. The composition of claim 1 wherein said water is selected from the group
consisting of fresh water, unsaturated salt solutions and saturated salt solutions.
5. The composition of claim 1 wherein said water is present in an amount in
20 the range of from about 60% to about 250% by weight of hydraulic cement therein.
6. The composition of claim 1 wherein said additive is present in an amount
in the range of from about 30% to about 100% by weight of hydraulic cement therein.

7. The composition of claim 1 wherein said microspheres are fly ash microspheres.

8. The composition of claim 1 wherein said microspheres are synthetic hollow glass microspheres.

9. The composition of claim 1 wherein said microspheres are formed of a chemically stable soda-lime borosilicate glass composition.

10. The composition of claim 9 wherein said chemically stable soda-lime borosilicate glass composition is non-porous.

11. The composition of claim 1 wherein said microspheres are present in said additive in an amount in the range of from about 30% to about 100% by weight of water in said additive.

12. The composition of claim 1 wherein said microspheres are present in an amount of about 67% by weight of water in said additive.

13. The composition of claim 1 wherein said clay suspending agent is selected from the group consisting of sodium bentonite, attapulgite, kaolinite, meta-kaolinite, hectorite and sepiolite.

14. The composition of claim 1 wherein said clay suspending agent is sodium bentonite.

15. The additive of claim 14 wherein said sodium bentonite is present in an amount of about 2% by weight of water in said additive.

16. The composition of claim 1 wherein said clay suspending agent is present in said additive in an amount in the range of from about 1% to about 4% by weight of water in said additive.

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17. A cement composition comprising:

a hydraulic cement;

water; and

an additive present in an amount in the range of from about 30% to about

5 100% by weight of hydraulic cement therein comprising:

an aqueous suspension of microspheres selected from the group consisting of fly ash microspheres and synthetic hollow glass microspheres present in said additive in an amount in the range of from about 30% to about 100% by weight of water in said additive, and

10 a water swellable clay suspending agent selected from the group consisting of sodium bentonite, attapulgite, kaolinite, meta-kaolinite, hectorite and sepiolite present in said additive in an amount in the range of from about 1% to about 4% by weight of water in said additive.

15 18. The composition of claim 17 wherein said hydraulic cement is selected from the group of Portland cements, slag cements, pozzolana cements, gypsum cements, aluminous cements and silica cements.

19. The composition of claim 17 wherein said hydraulic cement is Portland
20 cement.

20. The composition of claim 17 wherein said water is selected from the group consisting of fresh water, unsaturated salt solutions and saturated salt solutions.

21. The composition of claim 17 wherein said water is present in an amount in the range of from about 60% to about 250% by weight of hydraulic cement therein.

22. A cement composition comprising:

a hydraulic cement selected from the group of Portland cements, slag cements, pozzolana cements, gypsum cements, aluminous cements and silica cements;

5 water selected from the group consisting of fresh water, unsaturated salt solutions and saturated salt solutions and present in an amount in the range of from about 60% to about 250% by weight of hydraulic cement therein; and

an additive present in an amount in the range of from about 30% to about 100% by weight of hydraulic cement therein comprising:

10 an aqueous suspension of microspheres selected from the group consisting of fly ash microspheres and synthetic hollow glass microspheres present in said additive in an amount in the range of from about 30% to about 100% by weight of water in said additive, and

15 a water swellable clay suspending agent selected from the group consisting of sodium bentonite, attapulgite, kaolinite, meta-kaolinite, hectorite and sepiolite present in said additive in an amount in the range of from about 1% to about 4% by weight of water in said additive.